

LPD BALLISTICS UPGRADE 50 Arcand Dr, Lowell, MA 01852 PROJECT #23-020-2178

BID SET

OWNER:

LOWELL POLICE DEPARTMENT 50 ARCAND DR LOWELL MA 01852 P: 978.937.3200

ARCHITECT:

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| | DRAWING LIST | | |
|------------------------|---------------------------------------|---------------------|--------------------------|
| SHEET NUMBER | SHEET NAME | CURRENT REVISION | CURRENT REVISION DATE |
| TITLE SHEET | | | |
| T-001 | TITLE SHEET | A | 7.12.23 |
| ARCHITECTURAL A-200 | DEMOLITION PLAN & FLOOR PLAN | A | 7.12.23 |
| | INTERIOR ELEVATIONS & DETAIL SECTIONS | A | 7.12.23 |
| | CASEWORK DETAIL | A | 7.12.23 |
| ELECTRICAL E-001 | ELECTRICAL LEGEND | A | 7.12.23 |
| E-100 | ELECTRICAL EXISTING POWER PLAN | A | 7.12.23 |
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Lowell Police Department
50 Arcand Dr, Lowell, MA 01852
LPD BALLISTICS UPGRADE



ARCHITECTURE
PLANNING

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CONSULTANT:

ISSUE/REVISION:

NO: DATE: DESCRIPTION:
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KEY PLAN: PROJECT AREA = 1300 SQ FT

DRAWING TITLE: TITLE SHEET

DRAWN BY:
CF
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MA
SCALE:

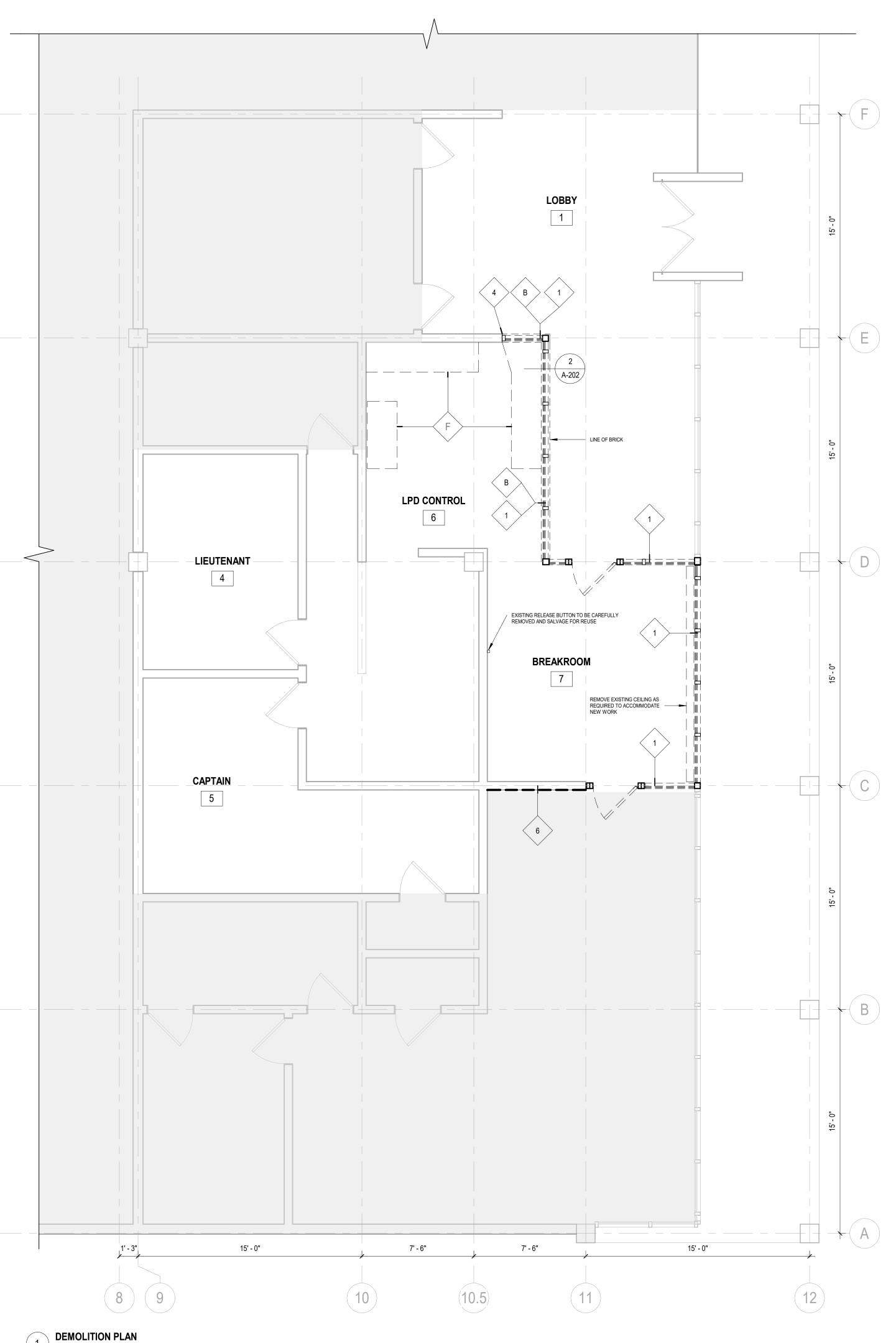
PROJECT NO.:
23-020-2178

DRAWING NO.:

T-001

PROJECT LOCATION:
BIM 360://Lowell - Police Dept. Headquarters/23-020-2178 Lowell Police Station.rvt

DATE & TIME PRINTED: 7/17/2023 11:24:15 AM



1 DEMOLITION PLAN
1/4" = 1'-0"

DEMOLITION NOTES

A INTERIOR GLAZED FRAMING SYSTEM TO BE REMOVED IN ITS ENTIRITY.

B BRICK KNEE WALL TO BE REMOVED IN ITS ENTIRITY.

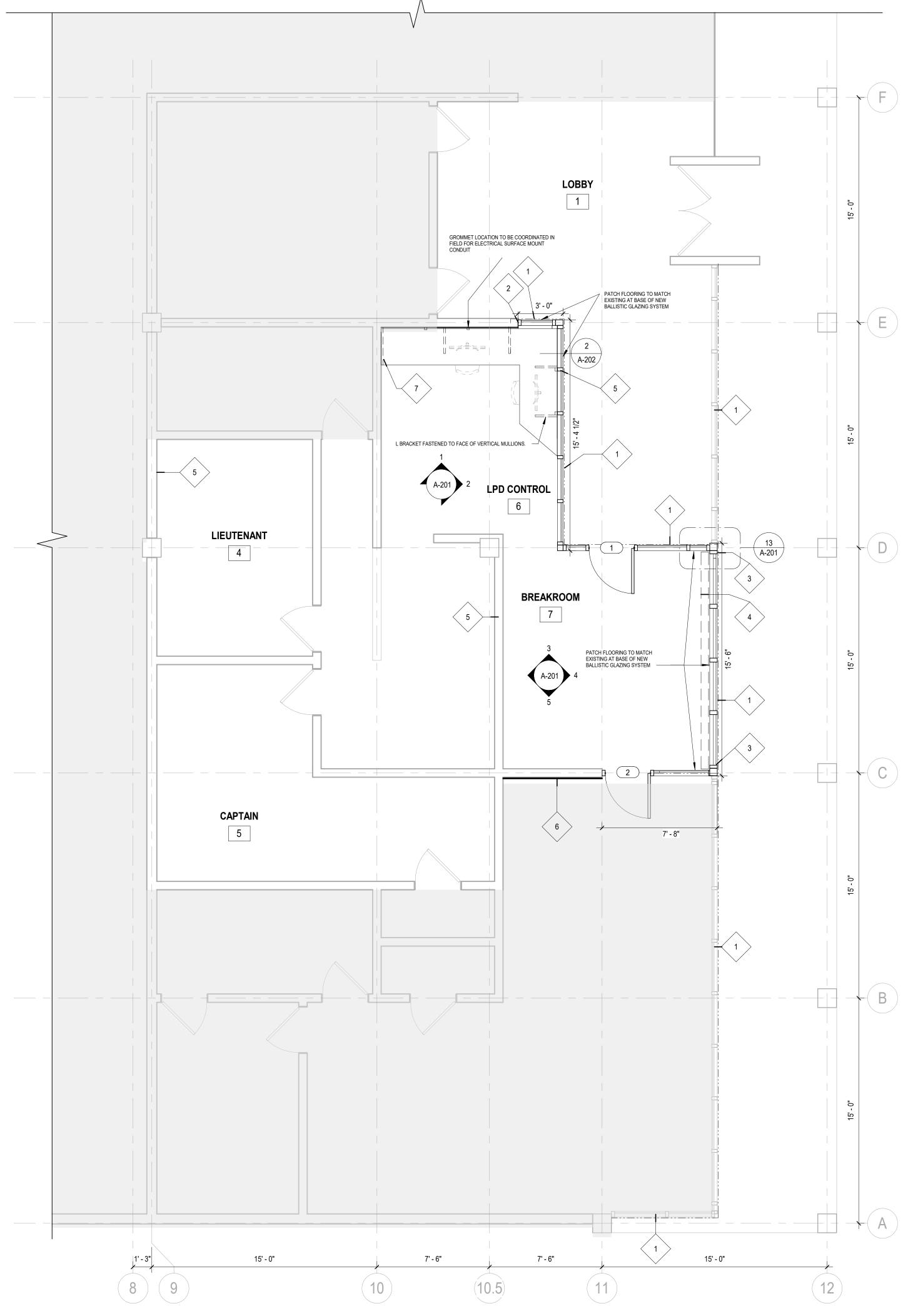
C EXTERIOR GLAZING SYSTEM BETWEEN COL. C & D TO BE REMOVED. D PREPARE FINISHED CONCRETE EDGE FOR NEW FINISH

E REMOVE EXISTING GYP. AND PREP FOR BULLET RESISTANT SHEET STEEL.

F REMOVE EXISTING FURNITURE. COORDINATE RE-USE WITH OWNER

DEMOLITION LEGEND GLAZING TO BE REMOVED - -

BRICK KNEE WALL TO BE REMOVED _____ EXISTING DOOR AND FRAME TO BE REMOVED



2 PROPOSED PLAN
1/4" = 1'-0"

GENERAL CONTRUCTION

- 1) FILM TINT TO BE APPLIED ACROSS ALL GLAZED BALLISTIC RATED SYSTEMS PREPARE MASONRY TO HAVE FINISH EDGE/SURFACE TO RECEIVE INTERIOR GLAZED BALLISTIC RATED FRAMING SYSTEM
- 3 EXTERIOR GLAZED BALLISTIC RATED FRAMING SYSTEM IS THERMALLY BROKEN (MAKE COPLANAR WITH EXISTING EXTERIOR SYSTEM)
- 4 REPAIR CEILING TO MATCH EXISTING COMPOSTION AND FINISH
- 5 REPLACE ANY DAMAGED CEILING TILES DUE TO ELECTRICAL ROUTING IN KIND. COORDINATE WITH ELECTRICAL
- 6 5/8" GYP OVER 3/16" SHEET STEEL 7 HARDWOOD CLEAT FASTENED TO WALL TO SUPPORT COUNTERTOP

Lowell Police Department

LPD BALLISTICS UPGRADE 50 Arcand Dr, Lowell, MA 01852



STRUCTURAL/CIVIL

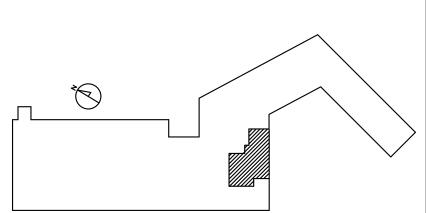
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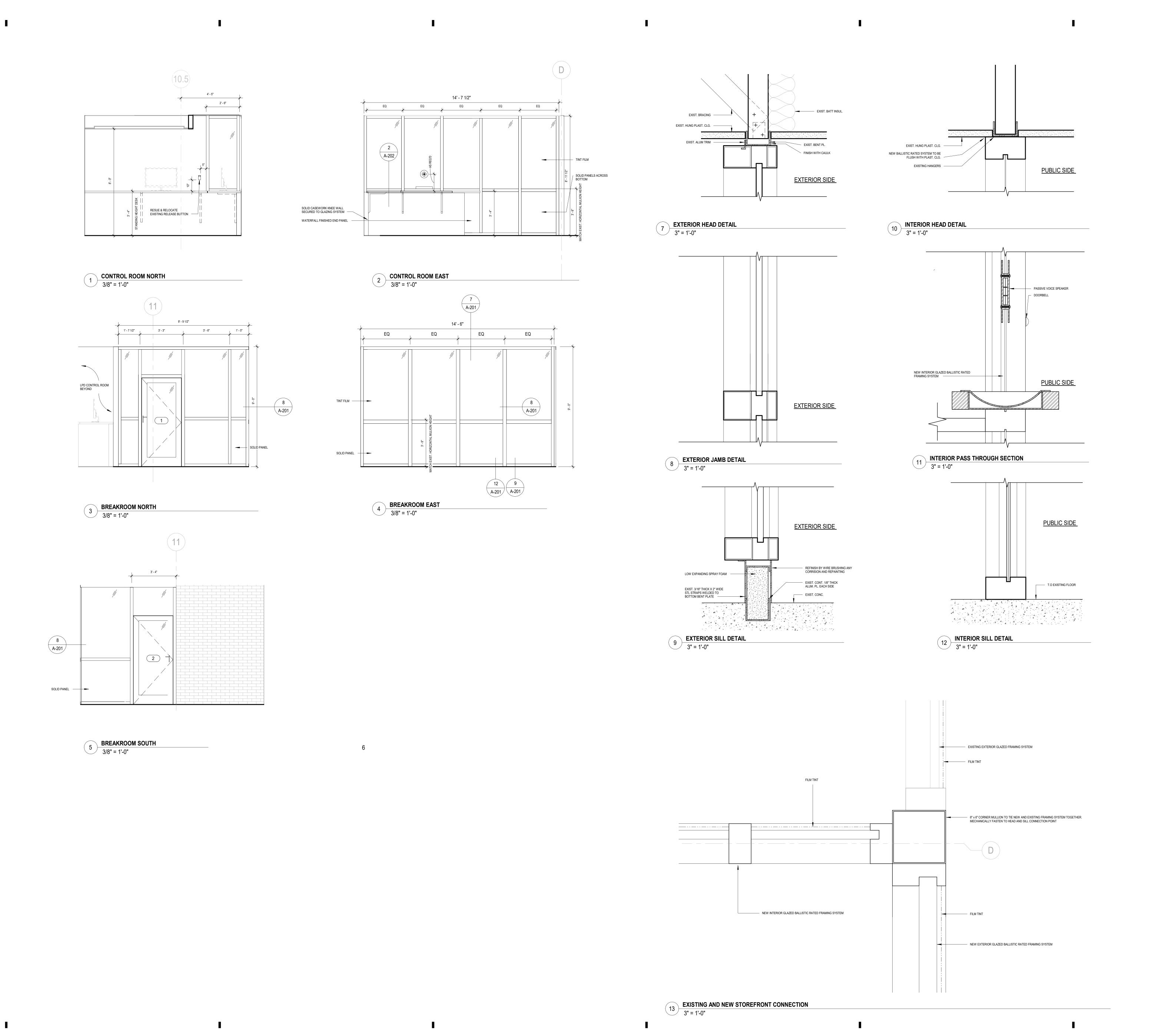
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DEMOLITION PLAN & FLOOR

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|--------------|---------|
| Author | OL/ IL. |
| CHECKED BY: | |
| Checker | |
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PROJECT LOCATION: BIM 360://Lowell - Police Dept. Headquarters/23-020-2178 Lowell Police Station.rvt DATE & TIME PRINTED: 7/17/2023 11:24:14 AM





Lowell Police Department

LPD BALLISTICS
UPGRADE
50 Arcand Dr, Lowell, MA 01852



ARCHITECTURE
PLANNING
INTERIOR DESIGN
ENGINEERING

STRUCTURAL/CIVIL

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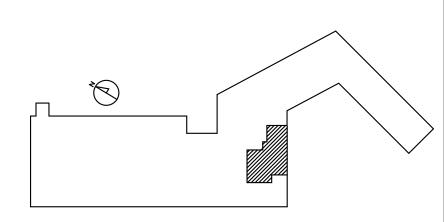
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DRAWING TITLE: INTERIOR ELEVATIONS & DETAIL SECTIONS

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| 23-020-2178 | |
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Δ-201

PROJECT LOCATION:
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Lowell Police Department

LPD BALLISTICS UPGRADE 50 Arcand Dr, Lowell, MA 01852

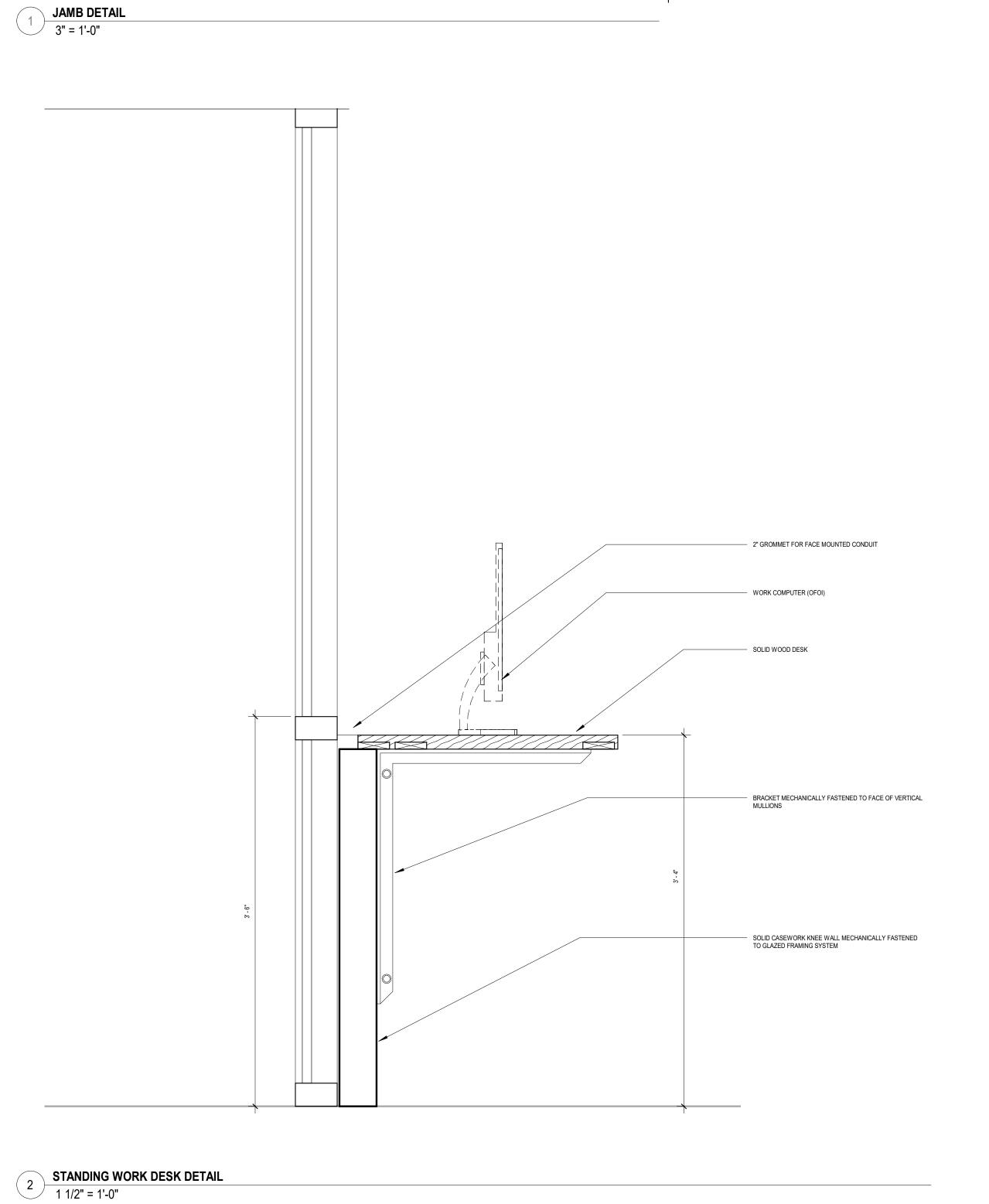


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CONSULTANT:



- EXIST. BRICK TO REMAIN

- BACKER ROD AND SEALANT

NEW BACKER ROD AND SEALANT

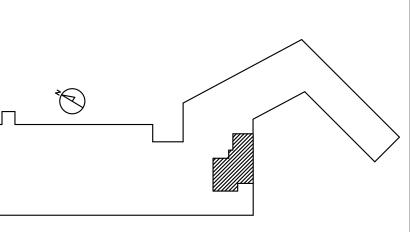
- EXISITING WOOD FRAMING TO REMAIN

NEW BALLISTIC RATED SHEET STEEL

NEW 5/8" GYPSUM. FINISH TO MATCH EXIST. CONDITIONS

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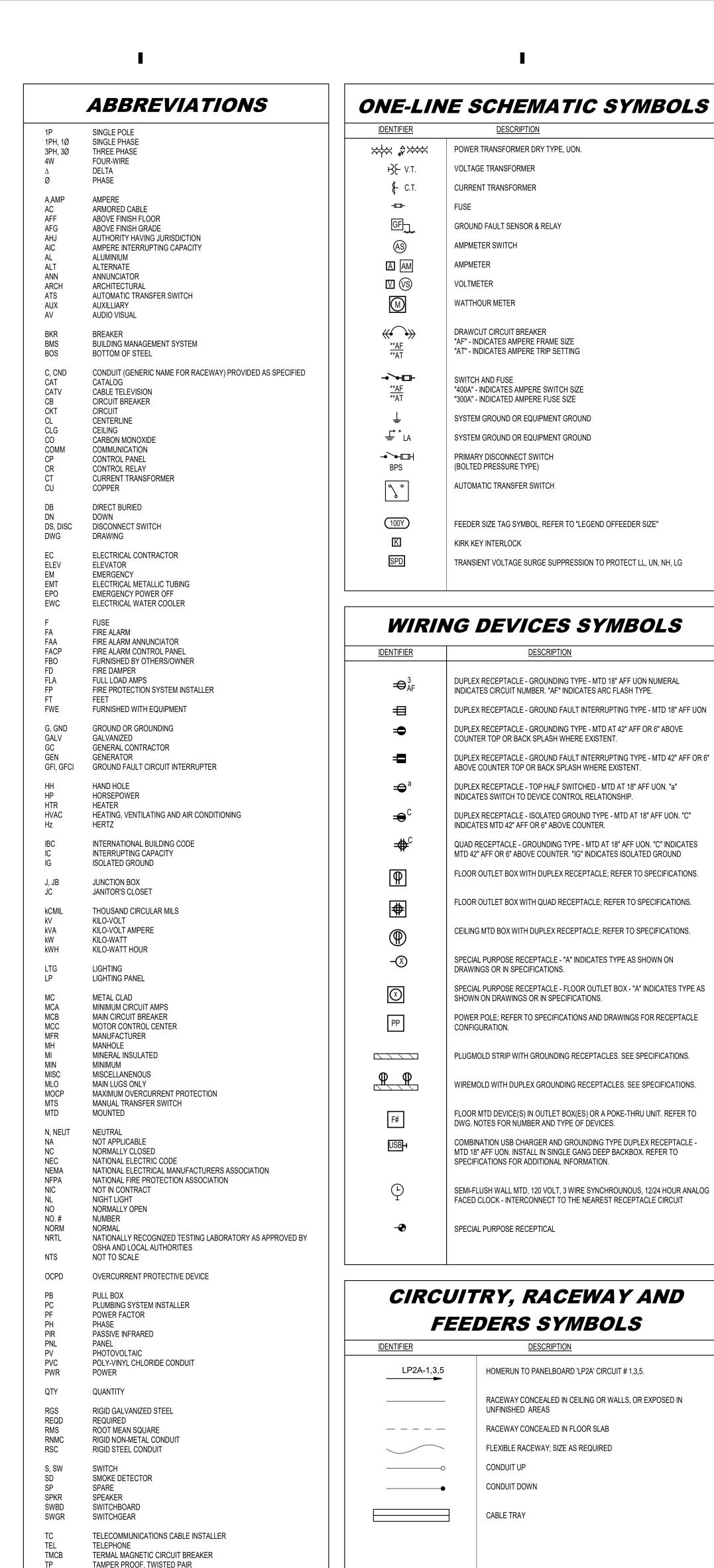


DRAWING TITLE:
CASEWORK DETAIL

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A-202

PROJECT LOCATION: BIM 360://Lowell - Police Dept. Headquarters/23-020-2178 Lowell Police Station.rvt DATE & TIME PRINTED: 7/17/2023 11:24:15 AM



GENERAL SYMBOLS

EQUIPMENT NUMBER

SHEET NUMBER

KEYED NOTE

DETAIL TAG/CALL OUT TAG

EQUIPMENT TAG

XX

X-XXX

<u>DESCRIPTION</u>

TWISTED PAIR SHIELDED

UNDERGROUND

VOLT AMPERE

WATT, WIRE

WIRE GUARD

WATER HEATER

WEATHERPROOF

TRANSFORMER

WYE (STAR)

EXPLOSION PROOF

TRANSIENT VOLTAGE SURGE SUPRESSER

UNDERWRITERS LABORATORY LISTING

UNLESS OTHERWISE NOTED

VOLT-AMPERE REACTIVE

VARIABLE FREQUENCY DRIVE

| RECEPTACLES (OF | FICE AREA) | 18" AF |
|-------------------|-----------------------------------------------------------|------------------|
| RECEPTACLES (UO | N) — — — — — — | 36" AFF |
| LIGHT SWITCHES | | 48" AF |
| DISCONNECT SWIT | CHES | NEC |
| TELEPHONE OUTLE | TS | — — — — 18" AF |
| TELEPHONE OUTLE | T (WALL MTD) | 48" AF |
| COMPUTER OUTLE | TS | – – – – 18" AF |
| CLOCK OUTLETS | | 7' - 6" A |
| FIRE ALARM PULL S | TATION | 48" AF |
| FIRE ALARM AUDIO | VISUAL ALARM — — — — | 80" AF |
| EXIT LIGHTS (WALL | MTD) | 1' ABC |
| EMERGENCY LIGHT | S (WALL MTD) | 7'-6" A |
| TV OUTLETS | . – – – – – – – - | – – – – 18" AF |
| AUDIO/VIDEO OUTL | ETS | 18" AF |
| MICROPHONE OUTI | ETS | – – – – 18" AF |
| PA ANNUNCIATOR F | PANEL | 48" AF |
| WELDING OUTLETS | | 36" AF |
| NO | E: DIMENSIONS ARE TO DEVICE CEN- UNLESS NOTED OTHERWIS | |
| | 0 | |
| | | |
| BUILDI | NG GROUN | IDING G |
| <u>IDENTIFIER</u> | DESCRIPTION | <u>\</u> |
| G | GROUNDING CABLE EXPOS | |
| G | GROUNDING CABLE BURIE | |

| ~ <u></u> | BOLTED BONDING CONNECTION |
|-------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| | |
| EQUI | PMENT SYMBOLS |
| <u>IDENTIFIER</u> | <u>DESCRIPTION</u> |
| ☑ | FUSED DISCONNECT SWITCH. "30AT" DENOTES SWITCH SIZE, "20AF" DENOTES FUSE SIZE. |
| | NON-FUSED DISCONNECT SWITCH. 30 AMP, UON. |
| \square $\frac{30AT}{20AF}$ | COMBINATION STARTER NON-FUSED DISCONNECT SWITCH, 3 POLE, 30A-3P SWITCH, WITH NEMA SIZE 1 STARTER UON. (FUSED STARTER DISCONNECT SWITCH INDICATED BY SWITCH AND FUSE SIZE). |
| \boxtimes | MAGNETIC MOTOR STARTER. |
| M | MOTOR - NUMERAL IN PLACE OF 'M' DENOTES HORSEPOWER |
| J | JUNCTION BOX - CEILING AND WALL MTD RESPECTIVELY |
| ω | JUNCTION BOX WITH CONNECT TO DEVICE |
| • | PUSH BUTTON DOORBELL, WIRED BY THE ELECTRICAL CONTRACTOR, VERIFY EXACT REQUIREMENTS WITH ARCHITECT PRIOR TO ROUGHING-IN |
| РВ | PULL BOX - SIZE PER ELECTRIC CODE |
| TC T | TIME CLOCK/TIMER. REFER TO SPECIFICATIONS. |
| С | CONTACTOR. REFER TO SPECIFICATIONS. |
| R | RELAY |
| VFD | VARIABLE FREQUENCY DRIVE |
| <u> </u> | EMERGENCY POWER OFF MUSHROOM TYPE PUSHBUTTON PROVIDED WITH FULL ALUMINUM GUARD, MOUNTED AT 54" A.F.F. UNLESS OTHERWISE NOTED. |
| \odot | LIGHTNING PROTECTION AIR TERMINAL ("S" DENOTES SPRING BASE). |
| | GROUNDING BUS BAR. |

LIGHTNING PROTECTION ROD

EXOTHERMIC BONDING CONNECTION

GROUND ROD

PANELBOARD DESIGNATIONS <u>IDENTIFIER</u> **DESCRIPTION** SURFACE MOUNTED PANELBOARD 120/208V, 277/480V, & CONTROL PANEL RESPECTIVELY. 6'-6" AFF TO TOP. RECESSED/FLUSH MOUNTED PANELBOARD 120/208V, 277/480V, & CONTROL PANEL RESPECTIVELY. 6'-6" AFF TO TOP. SURFACE MOUNTED DISTRIBUTION PANELBOARD 120/208V, 277/480V, & CONTROL PANEL RESPECTIVELY. 6'-6" AFF TO TOP. METER PLYWOOD BACKBOARD DRY TYPE TRANSFORMER, REFER TO ONE-LINE DIAGRAM & TRANSFORMER SCHEDULE - <u>ELECTRICAL SYSTEM</u> CR = CRITICAL PANEL DP = DISTRIBUTION PANEL E = EMERGENCY PANEL EQ = EQUIPMENT PANEL - CIRCUIT DESIGNATION L = LIGHTING PANEL LCP = LIGHTING CONTROL PANEL LS = LIFE SAFETY PANEL H = HVAC/MECH PANEL MDP = MECHANICAL DISTRIBUTION PANEL S = STANDBY PANEL OR = OPERATING ROOM (CRITICAL) PANEL B = BASEMENT UDP = UPS DISTRIBUTION PANEL 1 = FIRST FLOOR URP = UPS RECEPTACLE PANEL 2 = SECOND FLOOR $--\frac{\text{VOLTAGE}}{2} = 208/120$

4 = 480/277

ELECTRICAL GENERAL NOTES ALL ELECTRICAL WORK SHALL BE FURNISHED AND INSTALLED IN ACCORDANCE WITH THE 2020 EDITION OF THE NATIONAL ELECTRICAL CODE (N.E.C.), AND ALL LOCAL AND MUNICIPAL CODES HAVING JURISDICTION. ELECTRICAL CONTRACTOR (E.C.) TO VISIT SITE, ACQUAINT HIMSELF WITH EXISTING CONDITIONS AND INCLUDE ALL NECESSARY COSTS TO COMPLETE THE INSTALLATION. E.C. TO FURNISH AND PAY FOR ALL PERMITS AS REQUIRED AND OBTAIN FINAL CERTIFICATE OF INSPECTION. CATALOG NUMBERS ARE MEANT TO INDICATE TYPE DESIRED AND MAY BE SUBSTITUTED WITH AN APPROVED EQUAL DEVICE. "APPROVED EQUAL" MUST BE SUBMITTED TO THE ENGINEER FOR WRITTEN APPROVAL PRIOR TO INSTALLATION IN THE FIELD. WORK MUST BE COORDINATED WITH ALL OTHER TRADES TO ELIMINATE CONFLICTS AND INTERFERENCES. E.C. MUST PROVIDE PROPER "FIRE STOPPING" AT ALL PENETRATIONS THROUGH FIRE RATED ASSEMBLIES. SUBMIT EXACT MATERIALS AND METHODS TO THE ENGINEER FOR REVIEW AND APPROVAL PRIOR TO INSTALLATION. NO EXCEPTIONS TAKEN. CONTROL WIRING FOR HVAC UNITS (OTHER THAN LOW VOLTAGE POWER SUPPLY WIRING) SHALL BE DONE BY HVAC CONTRACTOR. CONDUIT AND WIRE ON POWER AND LIGHTING PLANTS IS NOT SHOWN EXCEPT FOR HOMERUNS. CONTRACTOR SHALL PROVIDE ALL NECESSARY CONDUIT, BOXES, PULL BOXES, WIRING, SWITCHES AND ACCESSORIES TO INTERCONNECT THE ELECTRICAL ITEM FOR CIRCUITING AND HOMERUNS

| | | FURNITURE VENDOR IS THE RESPONSIBILITY OF THE E.C. |
|-------------|----|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
| R <i>ID</i> | 11 | . E.C. MUST INCLUDE IN HIS PRICE ALL MATERIAL AND LABOR FOR TEMPORARY POWER AND LIGHTING FOR ALL TRADES DURING DEMOLITION (IF APPLICABLE) & CONSTRUCTION. |
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DEMOLITION LEGEND EXISTING ITEM TO REMAIN EXISTING ITEM TO BE DEMOLISHED EXISTING ITEM TO BE RELOCATED EXISTING ITEM TO BE RELOCATED TO NEW LOCATION NEW LINE TYPE EXISTING LINE TYPE DEMOLITION LINE TYPE ____ 1. ALL WIRING DEVICES, JUNCTION BOXES, EQUIPMENT AND ASSOCIATED BRANCH CIRCUITRY SHOWN WITH A LIGHTWEIGHT LINE ARE EXISTING - SHALL REMAIN AND BE MAINTAINED. 2. ALL WIRING DEVICES, JUNCTION BOXES, EQUIPMENT AND ASSOCIATED BRANCH CIRCUITRY SHOWN WITH A DOTTED LINE SHALL BE REMOVED. 3. ALL WIRING DEVICES, JUNCTION BOXES, EQUIPMENT AND ASSOCIATED BRANCH CIRCUITRY SHOWN WITH A HEAVYWEIGHT LINE IS NEW, EXISTING TO BE RELOCATED, AND/ OR EXTENDED PORTIONS OF EXISTING BRANCH CIRCUITRY INDICATED. LIGHTING SYMBOLS <u>IDENTIFIER</u> DESCRIPTION

a 2

INDICATED SYMBOLICALLY ON THE DRAWINGS. SEE LEGEND-HOMERUNS DESIGNATION FOR

UON ON PLANS AND SECTIONS: ALL HEAVY LINES ARE NEW EQUIPMENT CONDUIT, WIRING, ETC. ALL

E.C. MUST INCLUDE IN HIS PRICE COORDINATION OF POWER POLE (FOR POWER AND VOICE/DATA)

AND WALL "IN-FEED" BOXES AND "WHIPS" (SEALTITE OR EQUAL). E.C. TO PROVIDE ALL WALL BOXES

FOR POWER & VOICE DATA. E.C. MUST PROVIDE POWER WHIP, EMPTY VOICE/DATA RACEWAYS WITH

DRAG LINES, AND FINAL POWER CONNECTIONS TO FURNITURE SYSTEMS. FINAL COORDINATION WITH

SYMBOLOGY APPLICABLE TO ALL SYMBOLS SHOWN.

LIGHT LINES ARE EQUIPMENT, CONDUIT, WIRING, ETC. BY OTHERS.

| a Z | | |
|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| | CEILING OUTLET AND 2'x2' LED LIGHTING FIXTURE | |
| | CEILING OUTLET AND 1'x4' LED LIGHTING FIXTURE | |
| $\vdash \multimap \vdash$ | LED CHANNEL/STRIP LIGHT; SUSPENDED, CHAIN-HUNG | |
| 0 | CEILING OUTLET AND INCANDESCENT / H.I.D. / LED LIGHT FIXTURE | |
| Ю | WALL OUTLET AND INCANDESCENT / H.I.D. / LED LIGHT FIXTURE | |
| • | CEILING PENDANT | |
| D | WALL SCONCE | |
| | EMERGENCY (LIFE SAFETY) LIGHTING FIXTURE "NL" DENOTES NIGHT LIGHT "EM" DENOTED BATTERY PACK | |
| ₹ ⊗ ‡ | EXIT LIGHT FIXTURE, CEILING AND WALL MOUNT RESPECTIVELY, SHADING INDICATED DIRECTION OF FACE(S). DIRECTIONAL ARROWS AS INDICATED ON PLANS | |
| EB | EMERGENCY WALL PACK | |
| S3a | a = SINGLE POLE, 20 AMP, TOGGLE SWITCH CONTROLLING LIGHTS "a" 2 = DOUBLE POLE 3 = THREE-WAY SWITCH (20 AMP) 4 = FOUR WAY SWITCH (20 AMP) D = DIMMER SWITCH L = LOW VOLTAGE K = KEYED SWITCH M = MANUAL MOTOR SWITCH (THERMAL OVERLOAD) MC = MOMENTARY CONTACT SWITCH P = TOGGLE SWITCH WITH PILOT LIGHT (20 AMP) T = TIMER OPERATED SWITCH | |
| № ^A a | WALL MOUNTED LIGHTING CONTROL SENSOR. "A" DENOTES TYPE OF SENSOR AS SHOWN ON SENSOR SCHEDULE IN PLANS OR AS IDENTIFIED IN SPECIFICATIONS. "a" DENOTES DEVICE TO FIXTURE CONTROL RELATIONSHIP. | |
| MS) _a | CEILING MOUNTED LIGHTING CONTROL SENSOR. "A" DENOTES TYPE OF SENSOR AS SHOWN ON SENSOR SCHEDULE IN PLANS OR AS IDENTIFIED IN SPECIFICATIONS. "a" DENOTES DEVICE TO FIXTURE CONTROL RELATIONSHIP. FIXTURE TYPE INDENTIFICATION KEY LR 2———SEQUENTIAL NUMERAL INDICATOR | |
| | MOUNTING TYPE R - RECESSED T - TRACK S - SURFACE P - PENDANT W - WALL LAMP TYPE L - LED F - FLOURESCENT H - HID I - INCANDESCENT | |

CEILING OUTLET AND 2'x4' LED LIGHTING FIXTURE

TYPE "A", CONTROLLED BY SWITCH "a" AND

CONNECTED TO CIRCUIT NUMBER "2".

| THIS SHEET IS A GENERAL LIST OF SYMBOLS AND ABBREVIATIONS ARE FOR |
|-------------------------------------------------------------------------|
| REFERENCE ONLY AND SHALL BE USED AS A DICTIONARY TO DEFINE ITEMS |
| INDICATED ON DRAWINGS. SYMBOL LEGEND IS SHOWN FOR GENERAL REFERENCE |
| ONLY. THE PRESENCE OF A SYMBOL ON THIS LEGEND DOES NOT IMPLY ITS USE ON |
| THIS PROJECT. REFER TO DRAWINGS FOR SPECIFIC SYMBOLS USED. |
| - |

| <u>IDENTIFIER</u> | DESCRIPTION | |
|-------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|--|
| <u>C</u> R | CARD READER FURNISHED AND INSTALLED BY OTHERS, WIRED BY THE ELECTRICAL CONTRACTOR. VERIFY EXACT REQUIREMENTS WITH ARCHITECT PRIOR TO ROUGHING-IN | |
| KP | KEY PAD | |
| DC | DOOR CONTACTS | |
| ® | DOOR RELEASE | |
| PR | PROX READER | |
| BR | BIO READER | |
| M | MOTION SENSOR | |
| GB | GLASS BREAK SENSOR | |
| EL | ELECTRIC DOOR LOCK | |
| REX | REQUEST TO EXIT | |
| | VIDEO CAMERA | |
| P | PUSH BUTTON DOOR RELEASE | |
| SEC | SECURITY PANEL | |
| TEL | TELEPHONE PANEL | |
| <u></u> ≰ | DOOR BELL SPEAKER | |
| Φ | MICROPHONE | |
| | PUSH BUTTON DOOR BELL | |

| ∇ | STANDARD FLUSH WALL MOUNTED TELEPHONE OUTLET SHALL CONSIST OF (1) CATEGORY 6 4 PAIR UTP COPPER CABLE VIA (1) 3/4" CONDUIT WITHIN WALL AND TERMINATED ON A 8-PIN-8-CONDUCTOR CATEGORY 6 JACK. FURNISH AND INSTALL SINGLE PORT STAINLESS STEEL FACE PLATE WITH STUD FOR MOUNTING OF TELEPHONE ONTO A SINGLE GANG JUNCTION BOX AT 48" AFF. PROVIDE A MINIMUM OF 6" OF CABLE SLACK WITHIN THE JUNCTION BOX AND 12" OF CABLE SLACK NEATLY COILED ABOVE NEAREST ACCESSIBLE CEILING. "W" DENOTES WALL MOUNTED 5' AFF. |
|-----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| V | STANDARD FLUSH WALL MOUNTED TELECOMMUNICATIONS OUTLET DEDICATED FOR PRINTER / FAX LOCATIONS SHALL CONSIST OF (4) CATEGORY 6 4 PAIR UTP COPPER CABLES. TERMINATED ON 8-PIN-8-CONDUCTOR CATEGORY 6 JACKS. FURNISH AND INSTALL ON 4 PORT FACE PLATE WITH REDUCER RING ONTO A DOUBLE GANG JUNCTION BOX. DATA POINT LOCATION WILL VARY REFER TO ARCHITECTURAL DRAWINGS FOR EXACT PLACEMENT. PROVIDE A MINIMUM OF 6" OF CABLE SLACK WITHIN THE JUNCTION BOX AND 12" OF CABLE SLACK NEATLY COILED ABOVE NEAREST ACCESSIBLE CEILING. |
| ▼ | STANDARD FLUSH WALL MOUNTED TELECOMMUNICATIONS OUTLET. PROVIDE BOX WITH CONDUIT FROM BOX TO 3"(75mm) ABOVE AN ACCESIBLE CEILING OR INTO THE TELECOM CLOSET. INCLUDE PULL STRING AND TERMINATE WITH AN INSULATED BUSHING. BOXES SHALL BE RECESSED MOUNTED AT 18"(450mm) AFF, UNLESS INDICATED OTHERWISE. PROVIDE 1 1/4"C., 4 11/16" SQUARE x 2 1/8"DP. BOX WITH 4 11/16" SQUARE x 1 1/2"DP. EXTENSION BOX, AND 1/4" RAISED DOUBLE GANG PLASTER RING. RACO #259, 250 & 817 OR EQUAL. |
| <u></u> ₩ | STANDARD FLUSH WALL MOUNTED TELEVISION OUTLET SHALL CONSISTS OF (2) CATEGORY 6 4 PAIR UTP COPPER CABLE AND (1) RG6U COAXIAL CABLE VIA (1) 1" CONDUIT WITHIN WALL AND TERMINATED ON A 8-PIN-8-CONDUCTOR CATEGORY 6 JACK AND "F" TYPE CONNECTOR. FURNISH AND INSTALL TWO PORT FACE PLATE WITH REDUCER RING ONTO A DOUBLE GANG JUNCTION BOX. REFER TO ARCHITECTURAL DRAWINGS FOR MOUNTING HEIGHT. PROVIDE A MINIMUM OF 6" OF CABLE SLACK WITHIN THE JUNCTION BOX AND 12" OF CABLE SLACK NEATLY COILED ABOVE NEAREST ACCESSIBLE CEILING. |
| WAP | STANDARD CEILING MOUNTED TELECOMMUNICATIONS CONNECTOR DEDICATED FOR WIRELESS ACCESS POINT SHALL CONSISTS OF (1) CATEGORY 6 4 PAIR UTP COPPER CABLE WITH 10' OF CABLE SLACK, TERMINATED ON A CATEGORY 6 RJ-45 MALE CONNECTOR. |
| ▼ | FLUSH FURNITURE MOUNTED TELECOMMUNICATIONS OUTLET SHALL CONSIST OF CATEGORY 6 4 PAIR UTP COPPER CABLES VIA (1) 1" CONDUIT TO FURNITURE RACEWAY AND TERMINATED ON 8-PIN-8-CONDUCTOR CATEGORY 6 JACKS. PROVIDE AND INSTALL TWO PORT FACE PLATE AT LOCATION INDICATED. PROVIDE A MINIMUM OF 12" OF CABLE SLACK WITHIN THE FURNITURE RACEWAY |
| | # - DENOTES THE NUMBER OF CATEGORY 6 4 PAIR UTP COPPER CABLES AND THE NUMBER OF PORTS ON A FACE PLATE. |
| → | CEILING MOUNTED |

DRAWING LIST ISSUANCE

ELECTRICAL LEGEND

E-101 ELECTRICAL PROPOSED PLAN

ELECTRICAL DEMO PLAN

TITLE

DWG#



LPD BALLISTICS UPGRADE

50 ARCAND DR. LOWELL, MA



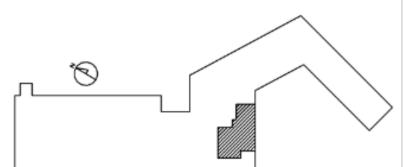
INTERIOR DESIGN

STRUCTURAL/CIVIL

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CONSULTANT:

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DRAWING TITLE:

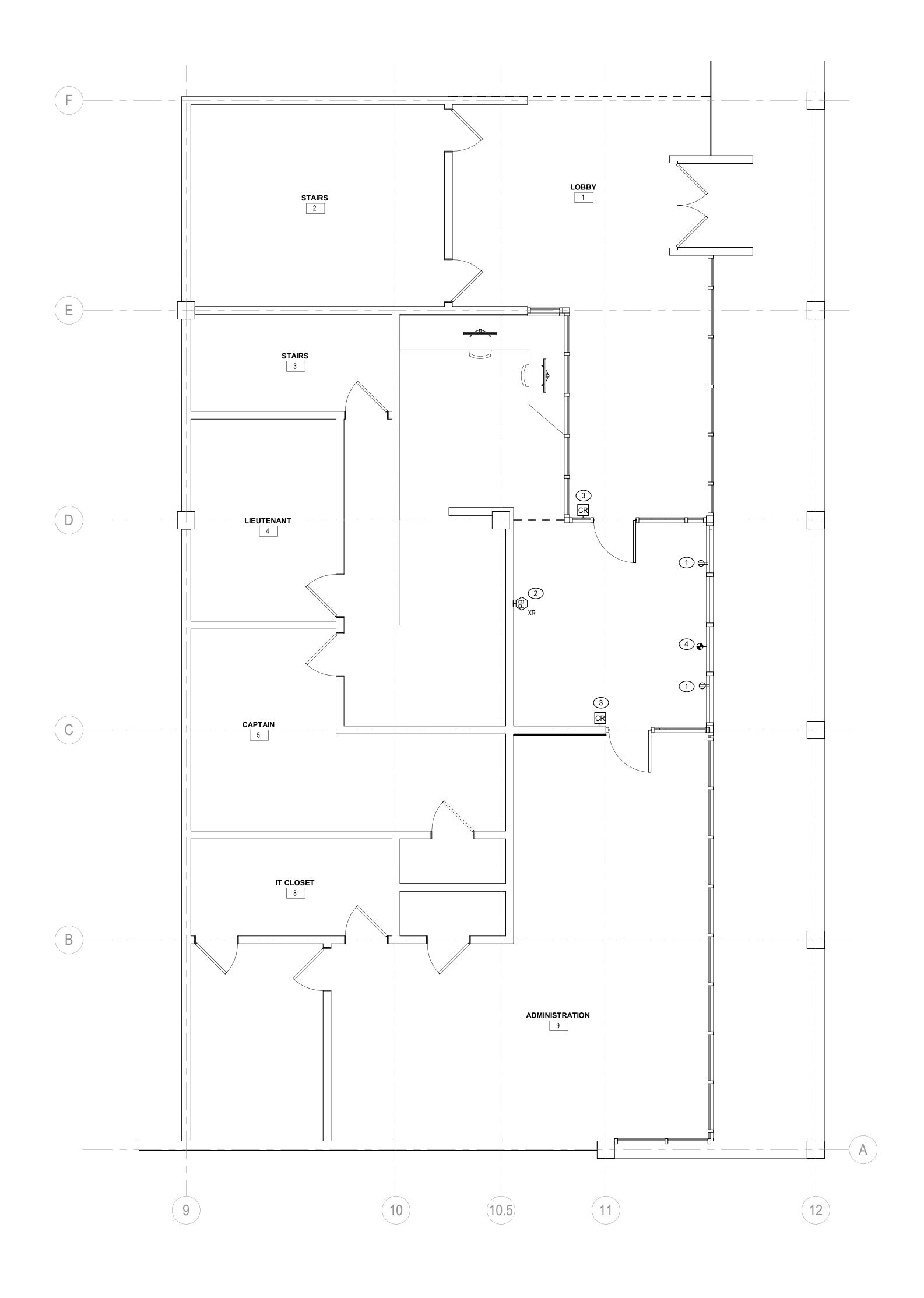
KEY PLAN:

| DRAWN BY: | SEAL: |
|--------------|-------|
| JMH | |
| CHECKED BY: | |
| RDM | |
| SCALE: | |
| N.T.S. | |
| PROJECT NO.: | |
| 23-020-2178 | |
| DRAWING NO.: | |

E-001

PROJECT LOCATION: BIM 360://Lowell - Police Dept. Headquarters/23-020-2178 Lowell Police Station MEP.rvt

DATE & TIME PRINTED: 7/10/2023 3:20:19 PM



GENERAL POWER NOTES

- 1. AS PART OF THE ELECTRICAL DRAWING PACKAGE, REFER TO MANUFACTURER APPROVED MANUAL/DRAWINGS FOR ALL INSTALLATION REQUIREMENTS AND PLACEMENT OF EQUIPMENT. PROVIDE ALL RACEWAYS, JUNCTION BOXES, CONDUITS, SWITCHED, POWER RELAY'S AND DEVICES AS INDICATED TO BE SUPPLIED AND INSTALLED BY CUSTOMER'S ELECTRICAL CONTRACTOR.
- 2. ALL CONDUITS OR CABLE DUCTS MUST BE SUITABLY SEALED AND PROTECTED TO KEEP THEM CLEAN AND DRY. PROVIDE ADEQUATE CLEARANCE FOR TYPICAL CONDUIT RADIUS OF SIX TIMES THE DIAMETER. CONDUIT BEND SHALL NOT EXCEED 270 DEGREES PER CABLE RUN. ROUTE ALL ROOM PENETRATIONS AS PERPENDICULAR TO THE ISOCENTER AS POSSIBLE TO AVOID RADIATION SCATTER. VERIFY ALL ROOM PENETRATIONS WITH THE PHYSICIST OF RECORD.
- 3. PROVIDE GROUNDING LOOP AND CONNECT TO EXISTING BUILDING GROUNDING SYSTEM IF THE SYSTEM EXISTS.
- 4. ALL POWER CONNECTIONS SHALL BE MADE BY ELECTRICAL CONTRACTOR.

SUBMIT REPORT INDICATING AVERAGE AND PEAK POWER DEAND.

- 5. ALL CABLES SHALL BE PULLED BY ELECTRICAL CONTRACTOR.
- 6. ALL SIGNAL CONNECTIONS SHALL BE MADE BY ELECTRICAL CONTRACTOR.
- 7. ELECTRICAL CONTRACTOR SHALL PROVIDE EXTRA 12' COIL OF CONDCUTORS AT EACH END OF ALL FEEDER AND UTILITY WIRING PULLS TO INSURE ADEQUATE CONDCUTOR LENGTH TO TERMINATION LOCATIONS.
- ELECTRICAL CONTRACTOR SHALL MAINTAIN EXISTING CIRCUITS THAT PASS THROUGH RENOVATION AREA
 ELECTRICAL CONTRACTOR SHALL PERFORM LOAD READINGS FOR AVERAGE POWER DEMAND OVER A 15
 MINUTE PERIOD CONTINUOUSLY RECORDED OVER A 30 DAY PERIOD ON ALL ELECTRICAL PANEL EFFECTED
 BY THE RENOVATION. VERIFY PANELBOARDS ARE NOT OVERLOADED BASED ON EXISTING LOADS AND NEW
 LOADS ADDED. IF PANELBOARDS ARE OVERLOADED, MAKE SAFE AND INFORM ENGINEER AND ARCHITECT.

KEYED NOTES

- 1 RECEPTICALS AND CONDUITS TO BE REMOVED AND REINSTALLED AFTER BALLISTIC GLASS INSTALLATION.
 MAINTAIN EXISTING CIRCUITRY, DEMOLISH EXISTING RECPETICAL AND CONDUIT AND REPLACE WITH NEW.

 2 DOOR LOCK RELEASE BUTTON TO BE RELOCATED. PROVIDE NEW CONDUIT.
- CARD READER AND CONDUIT TO BE REMOVED. PROVIDE NEW CONDUIT REINSTALL CONDUIT AND CARD READER AFTER BALLISTIC GLASS INSTALLATION
- 4 RECEPTICAL AND CONDUIT TO BE REMOVED



LPD BALLISTICS UPGRADE

50 ARCAND DR. LOWELL, MA 01852



ARCHITECTURE

PLANNING

INTERIOR DESIGN

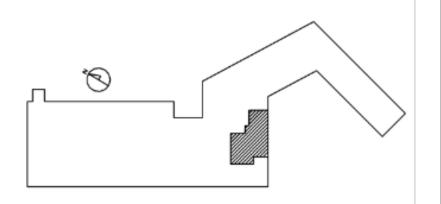
ENGINEERING

STRUCTURAL/CIVIL

529 MAIN STREET, SUITE 3303 BOSTON, MA 02129 TEL. 617.723.7100 FAX. 617.723.9113

CONSULTANT:

| ISSUE/REVISION: | | | | |
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| NO: | DATE: | DESCRIPTION: | | |
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KEY PLAN:

DRAWING TITLE:
ELECTRICAL DEMO PLAN

DRAWN BY:

JH

CHECKED BY:

RDM

SCALE:

1/4" = 1'-0"

PROJECT NO::

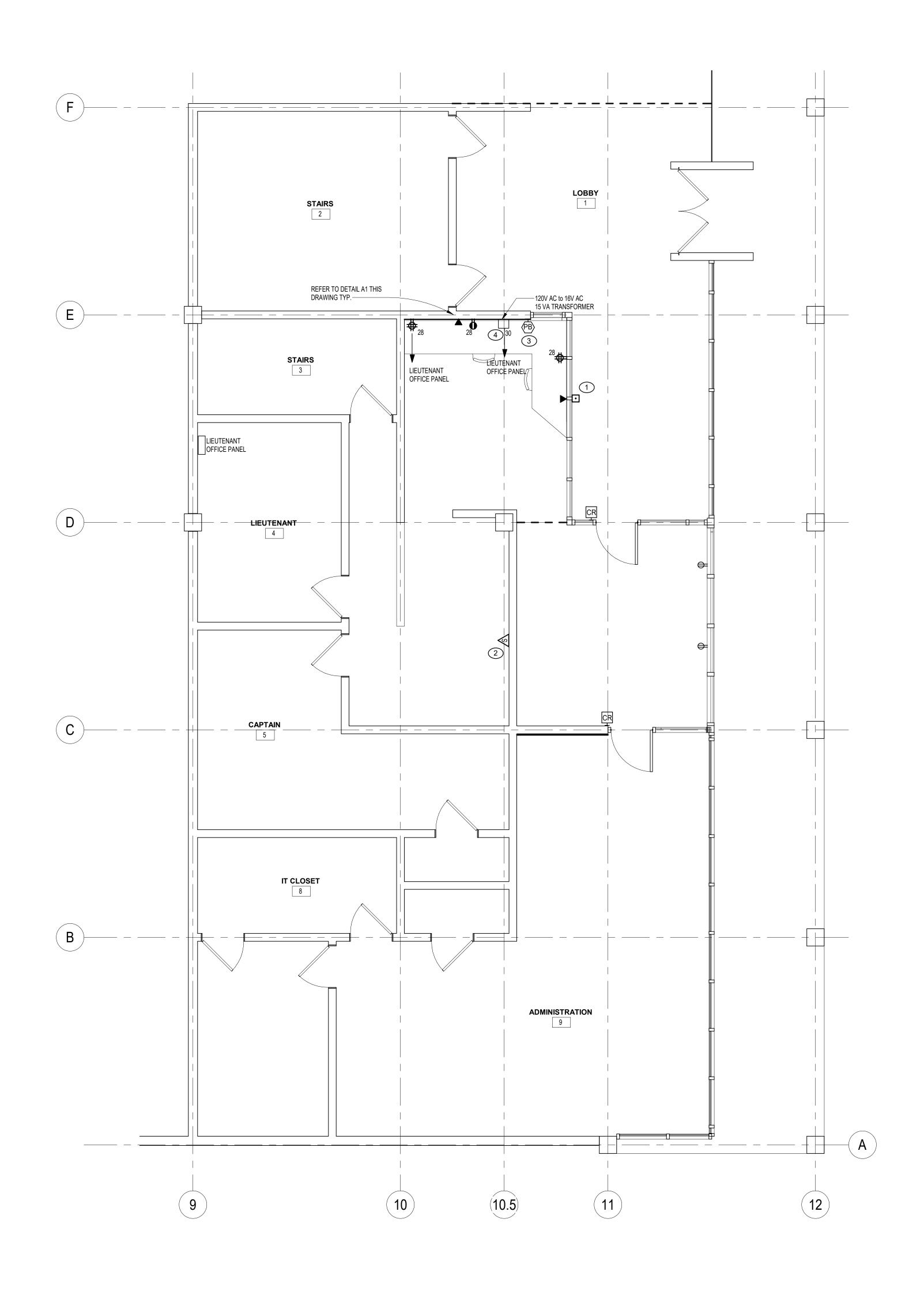
23-020-2178

DRAWING NO.:

E-100

PROJECT LOCATION:
BIM 360://Lowell - Police Dept. Headquarters/23-020-2178 Lowell Police Station MEP.rvt

DATE & TIME PRINTED: 7/10/2023 3:20:20 PM

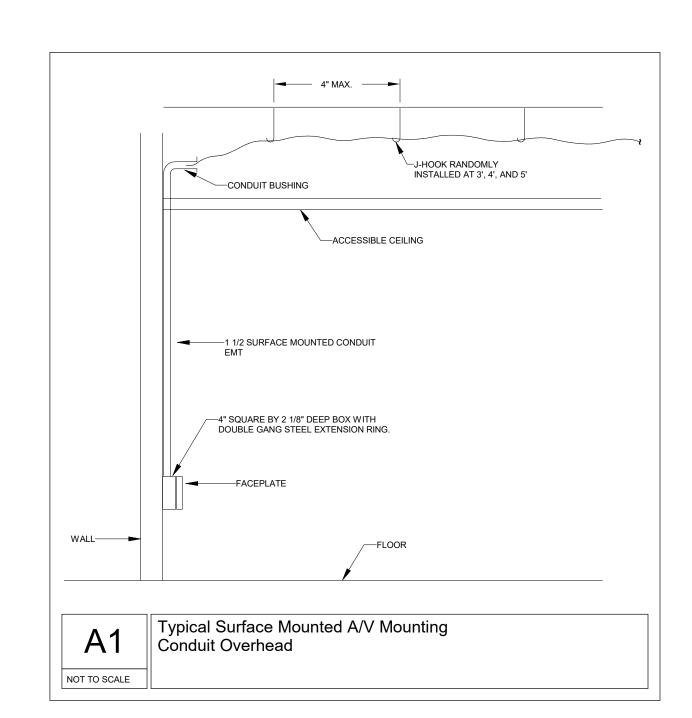


GENERAL POWER NOTES

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KEYED NOTES

- 1) INSTALL SPORE LED ILLUMINATED DOORBELL BUTTON: PART #TDB-W-BZ OR EQUIVALENT
- 2 INSTALL CRAFTMADE CHIME: PART NUMBER #CBR-W OR EQUIVALENT
- 3 DOOR LOCK RELEASE BUTTON NEW LOCATION
- POWER FOR DOORBELL AND CHIME





LPD BALLISTICS UPGRADE

50 ARCAND DR. LOWELL, MA



ARCHITECTURE
PLANNING
INTERIOR DESIGN
ENGINEERING

STRUCTURAL/CIVIL

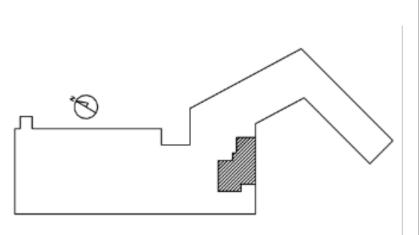
529 MAIN STREET, SUITE 3303 BOSTON, MA 02129 TEL. 617.723.7100 FAX. 617.723.9113

CONSULTANT:

ISSUE/REVISION:

NO: DATE: DESCRIPTION:

A 7.12.23 BID SET



KEY PLAN:

DRAWING TITLE:
ELECTRICAL PROPOSED PLAN

DRAWN BY:

JH

CHECKED BY:

RDM

SCALE:

1/4" = 1'-0"

PROJECT NO.:

23-020-2178

DRAWING NO.:

E-101

PROJECT LOCATION:
BIM 360://Lowell - Police Dept. Headquarters/23-020-2178 Lowell Police Station MEP.rvt

DATE & TIME PRINTED: 7/10/2023 3:20:22 PM